



Motorola University

Enterprise Model for Strategic Change Management

Motorola 1999 Groups

Sectors &

Architecture of Competitive Excellence

- **Personal Communications Sector**
- **Enterprise Communications Sector**
- **Commercial, Government and Industrial Solutions Sector**
- **Network Solutions Sector**
- **Global Telecom Solutions Group**
- **Internet and Networking Group**

Semiconductor Products Sector

Integrated Electronic Systems Sector

- **Network Management Group**
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Motorola Competitive Strengths

- **Quality**
- **World-Class Technology and Broad Product Portfolio**
- **Intellectual Property Portfolio**
 - **1208 U.S. Patents Issued in 1997**
 - **1225 U.S. Patents Issued in 1996**
- **Global Manufacturing and Sales Presence**
- **World-Class Alliances**

Vision

Imagine...

***“one stop shopping for all your
education and training,
performance improvement
needs”***

Motorola University Objective

To be Motorola's global education solution and services provider as the preferred choice for educational content, services, and support.

Customers

**Motorola
Institutional
Buyers and
Direct Partners**

**Motorola Institutional
Customers and Key Suppliers**

**Individual Motorola Associates,
Family and the Extended Motorola
Community**

External Customers of Motorola

Three Charters

- **Manage the design and acquisition of education and training products and services to meet the needs of Motorola's businesses and individual associates.**
- **Manage site education, training, and research facilities.**
- **Challenge today's assumptions and practices for a better tomorrow.**

Areas of Focus

- **Leadership, management, business, and transcultural education.**
- **Technology, specifically engineering, software, manufacturing, information systems, and quality.**
- **Marketing, sales management, and brand management.**
- **Emerging technologies for Motorola.**
- **Emerging markets for existing and future Motorola products.**

Motorola University Attributes

...platform of competencies

- **Strategic learning organization**
- **Driver of strategic change initiatives**
- **Protector and conveyor of values, history, culture**
- **Robust platforms for performance improvement : worldwide design and delivery**
- **Global look-out posts; intelligence gathering and feedback to Office of the CEO**

Motorola University Attributes; continued

- **Relationship management**
- **R&D for learning preferences; adults and children**
- **Primary school house for executive and management development;**
- **Lead responsibility for knowledge management: retrieval and utilization**
- **Organizational memory; connecting tissue**

Motorola University 1999



Account Management

Account managers:

- Are assigned to each Motorola business around the world.**
- Build shared vision and strategic partnerships between business units and Motorola University.**
- Provide “one face” to the customer through customer-intimate account management processes.**

Relationship Management

- **Account management**
- **Institutional management**
 - **USTTI**
 - **ASTD**
 - **NAB**
 - **Santa Fe Institute**
 - **American Association of Accredited Business Schools**
 - **Federal research labs**
 - **Various universities**
 - **Example: Purdue, A.S.U., Peking, etc.**

Motorola University Colleges



Motorola University Colleges

- **Partner with the regions (delivery centers) and account managers to create solutions for clients.**
- **Direct the competency development of key functional populations throughout Motorola.**
- **Lead MU's research and application of online learning strategies, tools, methodologies, and emerging business trends.**

Motorola University Colleges

- **Direct efforts in research and knowledge management.**
- **Provide stewardship for instructional design and learning development standards and methods.**

Motorola University Regions

Canada

**North
America**

**Latin
America**

Europe,

Middle East

**and
Africa**

**North
Asia**

**South
Asia**



Motorola University Primary Sites

--99 in 22--

ASIA

North Asia

Beijing
Tianjin
Korea
Japan

South Asia

Singapore
Australia
Taiwan/
Hong Kong
Australia
India

Malaysia
Sites

EMEA

Europe

Western
Europe
England
Northern E.
Southern E.
Scotland
Ireland
Israel

Eastern
Europe
Central
Europe

Middle
East
& Africa

Southern
Eastern
Africa

Americas

USA

East
Midwest
Ft. Worth
West
S.W.
S.E.

Latin
America
Argentina
San Paulo
Mexico

Canada
Toronto

Motorola University Regions

- **The Motorola University regions provide infrastructure support and the direct requirements for instruction, consulting, facilitation, materials, satellite and TV delivery.**
- **Regional representatives partner with account managers to identify local training needs and design courses.**
- **The regions customize solutions, with rapid turnaround, to local business operations.**

Technology-Based Learning Services

- **Creates and implements world-class distance learning capabilities and technology-based learning solutions.**

Evaluation and Measurement

- **Performs evaluation by measuring training effectiveness for internal and external Motorola customers.**
- **Through a quality team, leads in developing, implementing, measuring, and institutionalizing quality excellence.**

Strategic Planning

- **Facilitates and guides the development of a cohesive, integrated, strategic long-term business plan.**
- **Anticipates and develops new strategic opportunities for the university.**

Marketing

- **Provides leadership for creating value pricing models, levels, and standards for university products and services.**
- **Provides expertise in marketing intelligence, customer satisfaction indications, benchmarking, product launches, promotions, and marketing communications.**

Consulting and Training Services

- **Improves the business performance of Motorola's suppliers, channel partners, customers, and business alliances through performance consulting, process consulting, and continuous improvement consulting.**

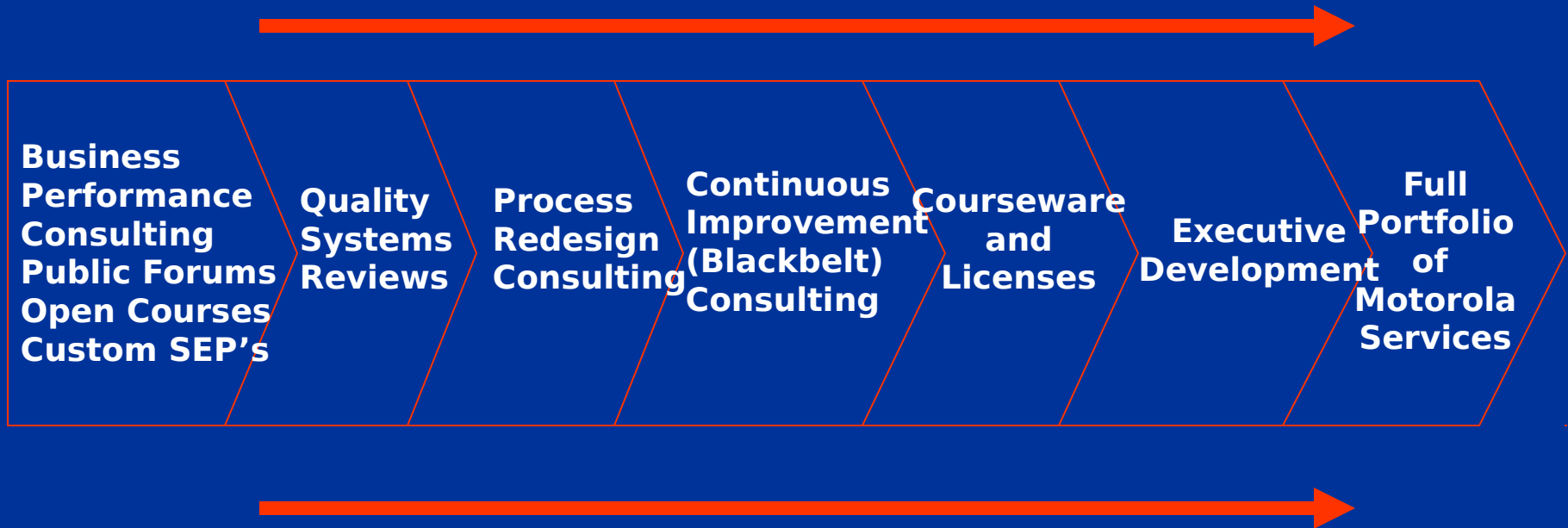
CTS Delivery Model



The Motorola University Value Chain

External Customers

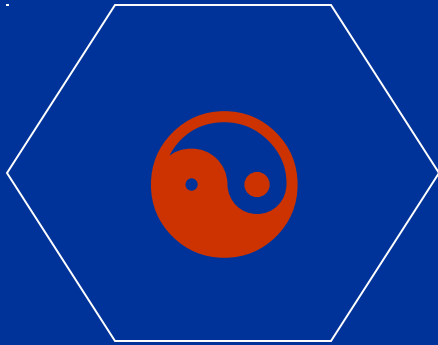
Path into Clients



**Value to Motorola and ROI
for Customer**

Briefings and Seminars

- **Motorola University conducts briefings and seminars for internal and external audiences including Quality Briefings and Motorola University Briefings**
 - **Drive strategic change**
 - **Provide benchmark information**
 - **Share best practices and deep knowledge**



Motorola University's Enterprise Model Global Corporate University

Global Corporate Universities Require

- **Robust service platforms**
- **Dynamic core of programs and services driving performance improvement**
- **A strategy and ability for systems integration**

Motorola Universities Competitive Advantage

MU Enterprise



The Integration Concept



Integration the Critical Element of the CU:

- **Integrating complex systems using performance improvement tools (training, education and research)**
- **Sustaining and driving consistent language and culture throughout the organization**
- **Identify Critical Business Issues, associated skill gaps, and performance improvement solutions**
- **Identify performance improvement solutions**

for

Organizational and Individual Learning

The Integration Strategy

Four Domains for Deployment

Agent of Change

- Global listening networks
- Intelligence gathering
- Anticipating business requirements
- Global design platforms
- Global delivery networks
- Alliances
- R&D
- Infomediaries

Learner

- Learning preferences
- K-16; Problem centered learning & Explorations
- BATB
- Levels I and II Evaluation

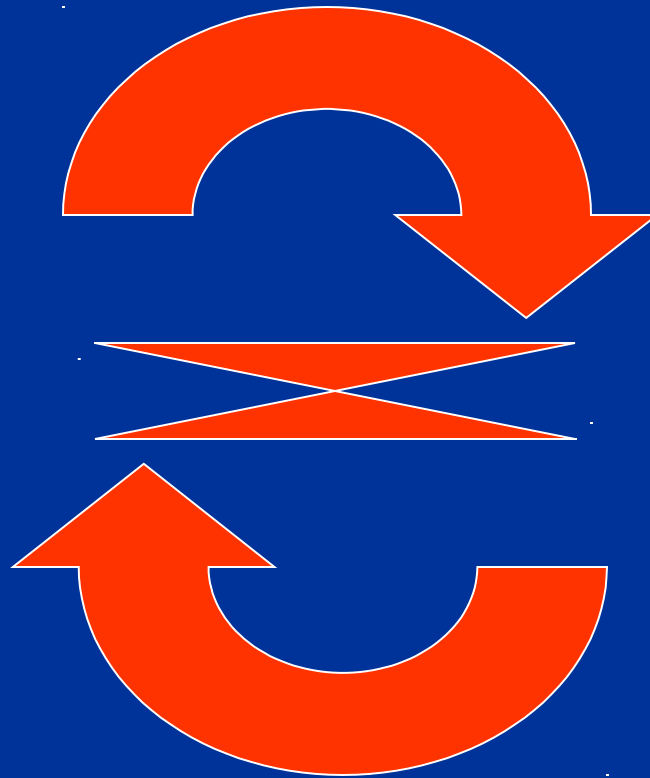
Learning Environments

- Global design platforms
- Teaching Firm Research
- Level 3 Evaluation
- Learning Industry Research
- Technology Based Learning
- Knowledge Management and Research

Learning Platforms

- Technology Based Education
- Teaching Firm Research
- Learning Industry Research
- Global Learning experience
- Learning and Technology new designs platforms
- New skill sets for designers
- Knowledge Management Research

Driving Change at Motorola



Driving Change



Motorola's Quality Renewal Milestones

1979	"Our Quality Stinks"
1980	Corporate Quality Officer named
1981	Motorola Training Center established
	5 year, 10X quality improvement goal set
1984	Communications Sector staff meeting
1985	Communications Sector begins total defect per unit measurement
	July- Manufactured Products
	November - Sales Orders
1986	Chairman changes agenda of customer visits
1987	Corporate adopts Six Sigma
	4 year, 100X quality improvement, Six Sigma goal
1988	Malcolm Baldrige Award
1992/	2 year, 10X quality improvement goal set
1993	Customer Satisfaction Metrics
	Changed measurement base to parts per million
1986	Sales up 4.75X; average compounded growth of 19.5%/
year	
to	Employee productivity increased 204%; 12.3% per year
average	
1996	Manufacturing cost savings over \$11.0 billion
1998	Five Nines (99,999% Operational)
1999	Performance Effectiveness

Senior Executive Programs

1984	Asia: Past, Present and Future
1985	Winning Globally
1986	Rise to the Challenge
1987	Total Cycle Time
1988	Through the Eyes of the Customer
1989	Total Customer Satisfaction
1990	Leadership for Performance
1990+	Software
	Emerging Markets
	Latin America
	Brand Equity Leadership

The MU Journey

1970s Challenge and Decision

1974 Leadership Training
1978 Education Study
1979 11 to 1 Vote
1979 MTEC

1980s Quality and Transition

1981 First Director
1984 1.5% Salary
1986 Galvin Center
1988 Europe
1989 Motorola University
1989 Singapore

1990s Globalization and Integration

1991 Competency Centers
1993 Japan, Korea, China
1994 Latin America
1996 Emerging Technologies
1997 Colleges
1997 Central/Eastern Europe
1998 Global Learning
1999 THE MERGER

China Accelerated Management Program (CAMP)

Critical Business Issues:

- **Unprecedented economic growth in telecommunications sector**
- **Significant corporate and sector investment**
- **Lack of local management talent to fill current positions**
- **Anticipated rapid Motorola expansion**

CAMP Program Objectives

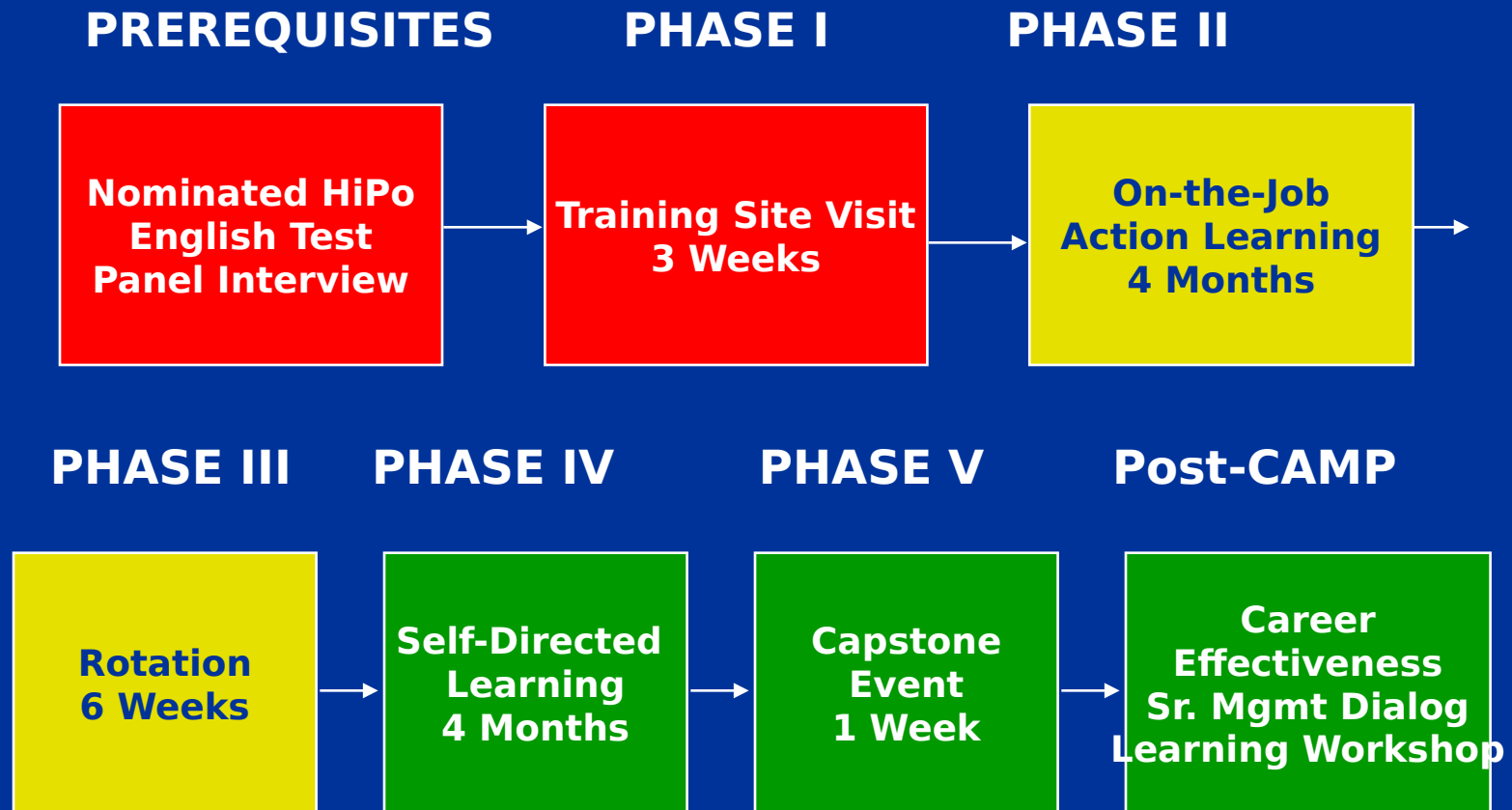
- Develop effective Middle Managers (E09-E11) in the short term who are capable of replacing expatriates at comparable levels.

■ Beijing	102	
■ Guangzhou		1 EXPATS
■ Shanghai		15
■ Leshan	5	
■ Fuzhou	1	
■ Nanjing	1	
■ Tianjin	<u>64</u>	

- Develop potential Senior Managers and leaders for the long term.

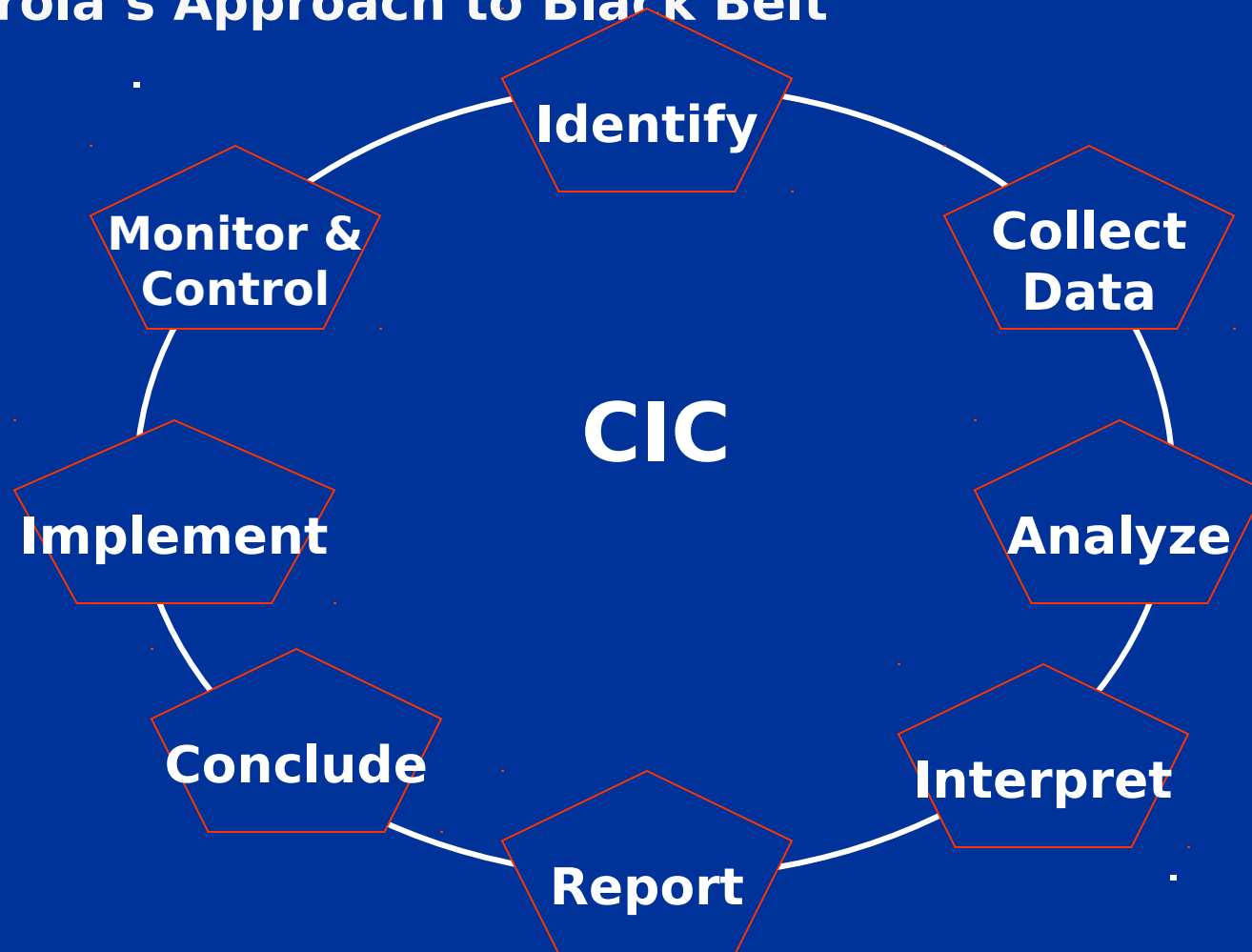
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CAMP Program Design - 5 Phases



Continuous Improvement Curriculum

Motorola's Approach to Black Belt



CIC Vision

- ***Recruit, develop, train and nurture strategic change agents to drive a process of continuous improvement through all products and services of the enterprise.***

Continuous Improvement Curriculum

Provides the training to support the implementation of an operational plan for Continuous Improvement.

Integrates multiple statistical methods classes into one comprehensive program delivered within a compressed time frame.

Associates participating in the CIC curriculum maintain their involvement to nurture a strong peer network for continued professional development.

CIC Work Study Projects

- **The CIC Work Study Project integrates actual improvement projects into the CIC program.**
- **Projects in measurement systems analysis, capability and control, and experimental design are assigned and implemented by participants.**
- **Project descriptions, conclusions, and net benefits are documented to management on “Case Study Day.”**

Continuous Improvement Curriculum

Core

- **Introduction to Continuous Improvement and Statistical Methods; 3 days**
- **Comparative Methods; 3 days**
- **Sources of Variation; 2 days**
- **Process Control and Capability; 2 days**
- **Introduction to Design of Experiments and Screening Experiments; 3 days**
- **Optimization Using Response Surface Methodology; 2 days**

Continuous Improvement Curriculum

Related Training

Introduction to Continuous Improvement Strategies and Statistical Methods Including JMP

- **Comparative Methods**
- **Continuous Improvement and Statistical Methods**
- **Sources of Variation**
- **Process Control and Capability**

Design of Experiments

- **Introduction to Design of Experiments and Screening Experiments**
- **Optimization Using Response Surface Methodology**

Continuous Improvement Curriculum

Related Training

- **Problem Solving and Teaming**
 - **Utilizing Six Steps to Six Sigma**
 - **Design for Manufacturability**
 - **Global Ford 8D Problem Solving**
 - **Participating in Projects**
 - **Teamwork Skills**
 - **Effective Presentations**

end